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<b>Notice of Allowability</b>	Application No.	Applicant(s)	
	10/631,293	NAMERIKAWA ET AL.	
	Examiner	Art Unit	
	Tai Van Nguyen	3729	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 31 July 2003 and 20 July 2004.
2. ☒ The allowed claim(s) is/are 21-23.
3. ☒ The drawings filed on 31 July 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☒ Certified copies of the priority documents have been received in Application No. 09/918,274.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                       |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date <u>31 July 2003</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                                   | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance              |
|  | 9. <input type="checkbox"/> Other _____.  |

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 21-23, drawn to a method of producing a piezoelectric/electrostrictive element, classified in class 29, subclass 25.35.
  - II. Claims 24-26, drawn to a method of producing a piezoelectric/electrostrictive device in which a piezoelectric/electrostrictive element, classified in class 29, subclass 844.
2. Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention of Group II has separate utility such as a substantially trapezoidal laminate and using a movable plate by adhesive. See MPEP § 806.05(d).
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with Stephen P. Burr (315-233-8300) on 14/7/2004 a provisional election was made traverse to prosecute the invention of Group I, claims 21-23. Affirmation of this election must be made by applicant in replying to this Office action. Claims 24-26 have been withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Stephen P. Burr on 20 July 2004.

#### **Specification:**

##### **The title:**

The title has been amended to: -- A METHOD OF PRODUCING A  
PIEZOELECTRIC/ELECTROSTRICTIVE ELEMENT --.

##### **In the Claim:**

Claims 1-20 and 24-26 have been cancelled without prejudice or disclaimed.

##### **Reasons for Allowance:**

The following is an examiner's statement of reasons for allowance: the prior art does not teach all of the limitations of the claimed invention including:

- forming a first electrode layer on an upper surface (14B) and a side surface (14) of an uppermost one of the piezoelectric/electrostrictive layers so as to establish an electric connection (23, 24) only with the first electrode layer lying immediately beneath the first electrode layer (12A) formed in this step; and a third step of firing the ceramic

substrate (41) and the laminate (11A-11D) at a given temperature; and  
a fourth step of removing (42) the laminate from the ceramic substrate.

The closest Prior art reference to the above feature is directed to Rutt et al (US 4,353,957). Rutt et al teach providing ceramic material (13) and applying conductive material (15) with terminals electrode (17). However, nowhere does Rutt et al teach defining a first electrode layer on an upper surface (14B) and a side surface (14) of an uppermost one of the piezoelectric/electrostrictive layers so as to establish an electric connection (23, 24) only with the first electrode layer lying immediately beneath the first electrode layer (12A) formed in this step; and a third step of firing the ceramic substrate (41) and the laminate (11A-11D) at a given temperature; and a fourth step of removing (42) the laminate from the ceramic substrate.

Accordingly, claims 21-23 are allowed.

Any comment considered necessary by applicants must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comment on Statement of Reasons for Allowance".

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tai Van Nguyen whose telephone number is 703-308-1791. The examiner can normally be reached on M-F (7:30-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TN.  
July 20, 2004



**A. DEXTER TUGBANG**  
**PRIMARY EXAMINER**